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AN EFFICIENCY ANALYSIS OF CONTRACTS FOR THE PROVISION OF TELEPHONE SERVICES TO PRISONS

By Justin Carver.....391

As the numbers of prisons and prisoners continue to increase, so does the market for prison services. One of the more lucrative segments of this industry is the telephone market. To the extent that the services are provided to the prisoners, the relationship resembles a third party beneficiary contract, but due to the perverse financial incentives and the political climate surrounding prisons and prisoners, neither the state nor the private entity acts in the best interests of the consumers in particular or of society in general. This Article will analyze the efficiency of these contracts, introduce alternate arrangements, and compare the efficiency of the present contracts to the alternatives.

An Efficiency Analysis of Contracts for the Provision of Telephone Services to Prisons

Justin Carver*

| | | |
|------|---|-----|
| I. | INTRODUCTION..... | 392 |
| II. | NATURE OF PRESENT CONTRACTS..... | 393 |
| | A. <i>Exclusive Provider Provisions</i> | 393 |
| | B. <i>Calling Options</i> | 396 |
| | C. <i>Cost of Calls</i> | 396 |
| | D. <i>States' Use of Revenue</i> | 400 |
| | E. <i>The Need to Maximize Access to Telephones</i> | 401 |
| III. | TELECOMMUNICATIONS ACT OF 1996..... | 401 |
| | A. <i>Removal of Barriers to Entry</i> | 402 |
| | B. <i>Interconnection</i> | 402 |
| | C. <i>Universal Service at Just Rates</i> | 403 |
| IV. | EFFICIENCY ANALYSIS..... | 404 |
| V. | STRUCTURE OF THE CONTRACTS AND GAME THEORY..... | 407 |
| | A. <i>The Payoff Matrix</i> | 407 |
| | 1. <i>State Incentives for Requiring Commissions</i> | 407 |
| | 2. <i>Incentives for Utilizing an Exclusive Dealing Provision</i> | 409 |
| | B. <i>Game Theory in the Awarding of Contracts</i> | 411 |
| VI. | ANALYSIS OF THE CONTRACTS..... | 413 |

* The Author practices law at Marica & Sigmund, L.L.C. in Jefferson City, Missouri, and specializes in civil litigation and business law. The Author wishes to express his gratitude to his wife and his colleagues for their continued support of this project, and to his former law school professor, David Sloss, for his generous advice and counsel.

| | |
|--|-----|
| A. <i>Present Contracts</i> | 413 |
| B. <i>No Kickback, Competition</i> | 414 |
| C. <i>Kickback, Competition</i> | 416 |
| D. <i>State-Owned Enterprise</i> | 417 |
| E. <i>Comparison of Approaches</i> | 417 |
| VII. CONCLUSION | 419 |

I. INTRODUCTION

The prison population in the United States has dramatically increased since the 1970s, and as recently as 1998, there were nearly two million inmates incarcerated in the United States.¹ As the numbers of prisons and prisoners continue to increase, so does the market for prison services. Indeed, the prison industry has already grown into a multibillion-dollar industry with its own trade shows and trade newspaper.²

One of the more lucrative segments of this industry is the telephone market. In the prison context, the state contracts with a private entity, and the private entity provides services to the prisoners and also to the state. To the extent that the services are provided to the prisoners, the relationship resembles a third party beneficiary contract. Due to the perverse financial incentives and the political climate surrounding prisons and prisoners, however, neither the state nor the private entity acts in the best interests of the consumers in particular or of society in general.

With respect to the financial incentives, it is estimated that inmate calls generate a billion dollars or more in annual revenue.³ One prison pay phone can generate \$15,000 annually; a typical public pay phone generates only one-fifth of that amount.⁴ Faced with the possibility of such revenues, MCI installed its inmate phone service in prisons throughout California at no charge to the state.⁵ As part of the deal, in exchange for the right to be the sole provider of telephone services to the prisons, MCI pays the California Department of Corrections a 32% share of all revenue derived from the calls.⁶ MCI adds a three-dollar surcharge to each call.⁷ The

1. Eric Schlosser, *The Prison-Industrial Complex*, THE ATLANTIC MONTHLY, Dec. 1998, at 51-52, available at <http://www.theatlantic.com/issues/98dec/prisons.htm>.

2. *Id.* at 63-64.

3. *Id.* at 63.

4. *Id.*

5. *Id.*

6. *Id.* This is standard practice. A 1995 study of state departments of correction reported that 38 of 41 respondents received commissions from inmate phone systems. See,

California example is by no means unique; it is the rule, rather than the exception.

This Article will analyze the efficiency of these contracts, introduce alternate arrangements, and compare the efficiency of the present contracts to the alternatives. In so doing, this Article will demonstrate that the present contracts are inefficient. More specifically, Section II discusses problems that are unique to the provision of phone service to prisoners, and introduces the practical shortcomings of the current contracts. The Telecommunications Act of 1996, the source of Federal Communications Commission ("FCC") regulatory jurisdiction, is discussed in Section III. Section IV introduces a few basic principles used in performing an efficiency analysis. Section V uses payoff matrices and game theory to demonstrate how the award process for the contracts causes inefficiencies to arise and perpetuate indefinitely. Section VI introduces alternate contract structures and demonstrates that certain alternatives are more efficient than the present contracts. Section VII contains a brief conclusion that calls for the FCC to adopt regulation that preempts existing state contracts which are inconsistent with the most efficient alternate structure.

II. NATURE OF PRESENT CONTRACTS

A. Exclusive Provider Provisions

The contract between the telecommunications provider and the state typically provides that the telecommunications provider will be the sole provider for a particular prison or prison system.⁷ Parties to these agreements often cite the high costs of the security systems associated with the operation of a phone system in a prison as justification for the exclusive-dealing provisions.⁸ Stated differently, the asserted justification is

e.g., JOINT LEGIS. AUDIT AND REVIEW COMM'N OF THE VA. GEN. ASSEMB., REVIEW OF THE DEP'T OF CORRECTIONS' INMATE TEL. SYS., House Doc. No. 70, 1997 Sess., at 3 (1997), available at <http://jlarc.state.va.us/reports/rpt199.pdf> [hereinafter JOINT LEGIS. AUDIT]. This Article will refer to the share of the revenue as "commission" or "kickback."

7. Schlosser, *supra* note 1, at 63.

8. JOINT LEGIS. AUDIT, *supra* note 6, at 16.

9. David Fischer, *Reach Out and Gouge Someone*, U.S. NEWS & WORLD REPORT, May 5, 1997, at 51. Clearly, a security system is both desirable and necessary. It is imperative that prisoners be precluded from running a drug ring while in prison, contacting and tampering with witnesses, and so on. Most if not all states, for example, require that the prisoner submit a list of persons that the prisoner would like to be able to contact by telephone. The persons are then investigated, and if approved, the names of those persons are then placed on the inmate's list. The inmate may contact by telephone only those persons who are on the approved list. Each inmate is allowed to place a limited number of persons on the inmate's list at a given time. See FLA. H.R., JUSTICE COUNCIL, COMM. ON CORRECTIONS, MAINTAINING FAMILY CONTACT WHEN A FAMILY MEMBER GOES TO PRISON:

that the market is a natural monopoly, or a market that "can be served most efficiently by a single incumbent firm."¹⁰

There are two reasons why the market is believed to be a natural monopoly: (1) the provision of telecommunications in general is best accomplished by one firm; and (2) the costs of the security system make it impracticable for more than one firm to service a prison. The first reason is based on bad economics, and as a matter of public policy, it has been abandoned by Congress.¹¹ The second reason is factually unsubstantiated as well as pretextual. At least one state, New Jersey, has authorized competition in the provision of telephone services to inmates, and in so doing, the only articulated concerns were security related.¹² The New Jersey Board articulated no "efficiency" concerns.

The truth is that states stand to earn additional revenue when a monopoly is providing the service, because the state will receive both a commission and tax revenue based on the monopoly profits.¹³ In fact, most states are not responsible for operating the security system; that task is delegated to the service provider. In 1998, New York estimated that the annual cost of overseeing the maintenance of the phone system, including the security system, was a mere \$283,000.¹⁴ Incidentally, the New York State Department of Correctional Service receives a 60% commission from MCI in exchange for granting MCI the right to be the sole service provider

AN EXAMINATION OF STATE POLICIES ON MAIL, VISITING, AND TELEPHONE ACCESS, at 20-21 (Nov. 1998), at <http://www.fcc.state.nj.us/fcc/reports/family.pdf> [hereinafter MAINTAINING FAMILY CONTACT].

10. E. THOMAS SULLIVAN & HERBERT HOVENKAMP, ANTITRUST LAW, POLICY & PROCEDURE 972 (4th ed. 1999).

11. See Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (codified at scattered sections of 47 U.S.C.).

12. Executone Information Systems, Inc., 141 P.U.R. 4th 519 (N.J. Bd. Reg. Comm'rs Apr. 5, 1993), available at <http://www.westlaw.com>.

13. For more detail, see *infra* Part VI.

14. John Sullivan, *New York State Earns Top Dollar From Collect Calls by Its Inmates*, N.Y. TIMES, Nov. 30, 1999, at A1. Where the states are responsible for the security system, the costs are higher. For example, in Oklahoma, the state received \$1.9 million in the year 2000, spent \$1.2 million on security, and retained a profit of \$700,000. Bobby Ross, Jr., *Cost of Calls May Decrease for Inmates; Board Asks for Change in Prison Phone System*, THE DAILY OKLAHOMAN, Jan. 26, 2001, 4A. According to a press release by Massachusetts CURE, the average cost of a collect call made in the state of Massachusetts is \$0.20 a minute. In Massachusetts prisons, calls are limited to a length of twenty minutes each. The minimum cost of a call made out of a prison in the Massachusetts 413 area code is \$8.50, or \$0.43 per minute for twenty minutes. Press Release, Massachusetts Cure, Prison Telephone Charges to 413 Area Triple Those Elsewhere - Rep. Swan Renews Call to Limit Tolls as National Boycott Begins (Aug. 1, 2000), available at <http://www.masscure.org/pressrelease0800.html> (on file with author) [hereinafter Swan Renews Call]. This Article explores whether the security system used in Massachusetts really doubles the cost of the calls or whether the 40% kickback imposed by the state does.

to prisons in New York.¹⁵ In 1998 alone, the Department received \$25 million pursuant to this arrangement.¹⁶ The Department has received approximately \$68 million since the inception of the arrangement.¹⁷ States often earn tens of millions of dollars in annual revenue from the telephone agreements, as do the telephone companies.

States also seek to justify the exclusive dealing provisions by asserting that there is competition for the award of the contract, and the threat of competition for the contract encourages the telephone service provider to act as though there is competition for the provision of the services. This argument is based on the theory of contestable markets. Where the identity of a monopolist is determined by a competitive bidding process, and where there is no collusion among bidders, the theory of contestability holds that the price charged by the monopolist will approximate that which is charged in a competitive market.¹⁸ Because the price charged by the monopolist is substantially similar to the price that would be charged in a competitive market, there is no need to regulate the monopolist.¹⁹ There are a number of problems with the application of the theory to this situation. First, note that for the theory to function properly, the bidding for the contract must be renewed regularly, because once a firm begins operating in the market, there is no incentive to price competitively.²⁰ It is also important to note that contestability has not worked well where the sunk costs are high, as they are here.²¹

More crucially, the manner in which these contracts are actually awarded does not fall within the traditional understanding of the contestability theory, which presumes that the contract will be awarded on the basis of cost and/or quality of service. Here, the contracts are usually awarded solely on the basis of which company will provide the state with the largest commission, and not on the basis of which company will provide the services at the lowest price.²² As the award process does not create an incentive for the firm to behave competitively, this practice is not

15. Associated Press, *Suit Targets Rates for Prison Phones*, *NEWSDAY*, Mar. 22, 2000, at A32, available at 2000 WL 10003231 [hereinafter *Suit Targets Rates*].

16. *Id.*

17. *Id.*

18. SULLIVAN & HOVENKAMP, *supra* note 10, at 973-74.

19. *Id.*

20. *Id.* at 972. A common term for the contracts is five years, which is probably too long a time for contestability to affect the behavior of the incumbent.

21. *Id.* at 973.

22. Fischer, *supra* note 9, at 52 (noting that the state of Florida awarded a contract to Sprint after Sprint outbid competitors and offered "to return a stunning 57.5 percent of its revenues to the state"). Previously, Florida had been receiving a 40% kickback. *Id.*

in accord with the economic theory of contestability.

B. Calling Options

Even where prisoners are required to place all calls through a particular provider, prisoners generally do not have the ability to choose between multiple calling options. The vast majority of states require that all calls made by inmates be made "collect," and therefore it is the prisoner's family or friends who actually pay for the call.²³ Prepaid calling cards are generally banned for fear that they contribute to or further a black market for contraband.²⁴

C. Cost of Calls

The cost of the phone calls varies from state to state, depending on the amount of the surcharge imposed by the company, the amount of the kickback to the state, and the amount of the cap to which the rates are subject. In some states, the rates charged by the telephone company for collect calls made from prisons are capped at the rate that would be charged on collect calls made from a pay phone outside of prison.²⁵ Of course, the surcharges do not count against the cap, so the actual rate charged for calls from inside a prison still exceeds the rate charged on external calls.

It is also important to note that telephone companies are often required by regulatory authorities to install and maintain a number of public pay phones in the area served by the phone company.²⁶ The installation of these pay phones is considered by regulators to be a compulsory public service, and this service is made mandatory by regulators who believe that greater access to pay phones increases public access to 911 emergency service. This requirement is very unpopular with

23. See *Global Telcoin, Inc.*, No. U-20784-B, 1995 WL 59684, at *1 (La. Pub. Serv. Comm'n Jan. 17, 1995) (noting that inmates are not free to choose the operator service or long-distance carrier of their choice due to concerns about fraud). How fraud would be more of a problem when the family is responsible for paying the bill is not entirely clear. Presumably, the family has long-distance service in its residence. Does the Louisiana Public Service Commission believe that the family can be trusted to pay the long-distance bill from the regular long-distance provider, but not the bill for the call from the prison? Even if the answer is yes, does that answer justify the rule precluding a prisoner from choosing a provider? The rule effectively grants the carrier the power to charge a monopoly price; presumably, as prices increase, the rate of fraud increases. So perhaps the rule creates the fraud, which in turn creates the need and justification for the rule.

24. MAINTAINING FAMILY CONTACT, *supra* note 9, at 24.

25. *AT&T Comm. of N.H., Inc.*, 79 N.H. P.U.C. 639, 639 (N.H. Pub. Util. Comm'n Nov. 14, 1994), available at 1994 WL 854500. Of course, the rate cap is usually set to match the highest rate charged at the peak times by any provider in the state.

26. *Re Rates and Charges Paid by Pay Telephone Service Providers to Local Exchange Carriers*, Florida Public Service Comm'n, Feb. 14, 1991, 120 P.U.R. 4th 530 at *28.

telephone companies, which are often required to install and maintain pay phones in unprofitable locations with low call volume.²⁷ Regulators have generally been responsive to these concerns and have allowed telephone companies to increase the rate charged on all pay phones, effectively allowing the unprofitable pay phones to be subsidized by the profitable ones.

As noted above, prison pay phones have an inordinately high amount of call volume, as compared to public pay phones. Where the rates are capped, they are often capped to match the highest of the rates charged by a firm providing service outside a prison.²⁸ Also, depending on the state, the cap inside the prison does not necessarily reflect time of day discounts.²⁹ Therefore, even where the rates for collect calls from prisons are capped at the "outside" rate, the inside rate cap is based on false assumptions about phone use in the outside market. As a result, the charges for the inside calls are disproportionately higher than the cost. Inmate challenges to the rates are generally unsuccessful.³⁰

In other situations, the rates are not capped in such a manner that they correspond to the rates made for outside calls.³¹ Because the state is not paying for the calls, it seems reasonable to conclude that it would be less concerned with the cost of the calls than if it were responsible for paying the bill. Stated differently, the state receives the benefit of having a service provided, but does not have the corresponding burden of paying for that

27. *Id.*

28. Operating Practices of Alternative Operator Serv. Providers, No. U-17957, 1993 WL 561415, at *2 (La. Pub. Serv. Comm'n Sept. 23, 1993) (comparing the rates charged by four providers, and noting that guidelines required that the rate cap match the highest rate charged by one of the four).

29. *Id.* (ordering that the construction given to the rate cap be changed, allowing the rate cap to be construed to reflect time of day discounts).

30. See, e.g., *Jackson v. Taylor*, 539 F. Supp. 593, 595 (D.D.C. 1982) (holding that prison officials were immune from an antitrust claim arising out of an alleged practice of fixing the price of phone calls made from the prison); *Comm. Workers of Am. v. Pac. Bell*, 61 C.P.U.C.2d 647 (Cal. Pub. Util. Comm'n Oct. 5, 1995) (holding that the prison itself is the customer, and that prisoners were not consumers of a telephone system, and that therefore, only the prison was guaranteed access under state regulations); *Basham v. Mountaineer Power Sys.*, No. 92-1026-COCOT-C, 1995 WL 447123, at *9 (W. Va. Pub. Serv. Comm'n June 15, 1995) (categorizing prisoner complaints into four categories: "those regarding the type of system offered, those regarding whether the system complies with the Commission's rules and regulations, those regarding the functioning of the system, and those regarding the rates charged"). The West Virginia Public Service Commission found that only those claims dealing with the functioning of the system can be brought by an inmate before the Commission. *Id.* Complaints regarding the cost of the service were found not to be "entertained by the Commission in the context of a complaint case but are instead reviewed in the service provider's next rate proceeding." *Id.*

31. MAINTAINING FAMILY CONTACT, *supra* note 9, at 22.

benefit. That burden falls on the families of the inmates.

The states and the phone companies seek to justify the cost of the calls on a number of grounds. Phone companies cite to a high rate of "toll fraud," where bills are sent to invalid or incorrect addresses.³² Again, why fraud is more of a problem in the context of calls received from a prison than in the context of routine long-distance calls is not entirely clear.³³

The cost of the calls can be partially justified by the expensive security systems that are a necessary component of the prison telephone systems. Of the asserted justifications, this one has actual merit, for the security systems are clearly necessary. Nonetheless, one has to question whether the security systems currently in place are the most cost-efficient systems available. Since the service provider operates without any real threat from competition, the provider has fewer incentives to keep costs low.

Most states are candid enough to admit that the kickbacks they receive from the service provider do increase the cost of the calls for the consumer.³⁴ Nonetheless, these states argue that the telephone system is not without costs, and that it is only fair that those who use the system pay for part of the costs of the system. Of course, this argument fails to note that for the state, the system may very well be without costs. As noted above, in California, MCI installed the entire system at no cost to the state, and MCI allows state employees to make calls for free. *Effectively, the families are paying for the state's use of the system.* Isn't it only fair that those who use the system pay for part of its costs? Note that even where the system is not without cost to the state, the state earns much more from the system than it spends on the system.³⁵

A number of telecommunications providers supplying service to prisons have engaged in unscrupulous billing practices, such as:

32. See Rates, Terms and Condition for Inmate Telecomm. Serv., No. 368, 1999 WL 179812, at *2 (Ky. Pub. Serv. Comm'n Jan. 15, 1999). This view assumes that an error in billing must necessarily be the fault of the consumer, and therefore, increased prices are entirely justified. Note that when the company does not get paid, the consumers are accused of engaging in fraud. Of course, where the company charges consumers for calls that were never made or overcharges consumers for calls, then it is not fraud.

33. As prices increase, so does the rate of fraud. Therefore, it is possible that the structure of the agreements increases the cost of the calls, creating the increased fraud. Higher rates of fraud in turn create the apparent justification for the higher costs.

34. MAINTAINING FAMILY CONTACT, *supra* note 9, at 22 (admitting that the cost of the calls is affected by the "sizable commission" received by the state).

35. *Id.* at 29. After costs, New York state pocketed \$20-21 million from the commissions in 1997-1998. *Id.* Are the users merely paying their fair share for telecommunications service, or are they paying more?

programming phones to start billing before the recipient accepts the call;³⁶ imposing surcharges in excess of those allowed;³⁷ failing to discount calls made at off-peak times;³⁸ and charging for unauthorized calls.³⁹ The potential for fraud on the part of a provider is exemplified by the recent behavior of Global Tel*Link Corporation ("Global"), which operates inmate phone systems in several states. Global was found to have engaged in a number of illegal activities, including the following: starting the internal time clock on the phones either 15 or 36 seconds ahead,⁴⁰ charging rates that exceed the authorized rates,⁴¹ adding time and money to each call,⁴² and billing a call more than once.⁴³ Another provider was found to

36. Equal Access Corp., No. FCU-90-5, 1991 WL 519835, at *3 (Iowa Util. Bd. Feb. 6, 1991).

37. MCI Telecomm. Corp., No. 960617-TL, 1998 WL 391688, at *1 (Fla. Pub. Serv. Comm'n June 9, 1998) (noting that MCI imposed surcharges that were, at various times, \$2.00 or \$1.25 in excess of the permitted surcharge). This matter also illustrates the difficulty of dealing with the overcharges. Pursuant to a previous Florida Public Service Commission order, MCI attempted to issue refunds to those individuals who were overcharged. *Id.* A large number of those persons could no longer be located, however. MCI requested that the funds be placed in a trust fund for prisoner advocacy groups, but the Commission ordered an immediate rate reduction. *Id.* As a side note, when MCI sent bills to invalid addresses, MCI cried "fraud" and went to the Commission.

38. Equal Access Corp., 1991 WL 519835, at *3.

39. *Id.* at *4. See also La. Pub. Serv. Comm'n v. Quest Correctional Comm., Inc., No. U-21318, 1996 WL 532269, at *4 (May 14, 1996) (noting that one firm used 309 pay stations at a prison, but the company only paid for 168 of those lines). This case is not necessarily important for its impact on the rate charged on inmate calls, but it could impact the quality of service. Also, it is illustrative of an additional manner in which a provider could circumvent any applicable regulations.

40. La. Pub. Serv. Comm'n, No. U-20784, 1995 WL 59684, at *5 (Jan. 7, 1995) (noting that this programming is made more significant by the fact that Global, as well as most telephone companies, round up the time of the call to the next minute).

41. *Id.*

42. *Id.* at *6 (noting that Global may have used as many as twenty-five different add-on techniques).

43. *Id.* at n.5. Apparently, Global would also combine these techniques. For example, on any particular call, Global may have started the internal clock ahead, charged a rate in excess of that allowed, added on additional time and money to the call, and then billed the customer more than once for that same call. The total amount of the overcharges, in Louisiana alone, was calculated to be \$1,243,000. *Id.* at *11. See also Global Tel*Link Corp., No. 93-C-0801, 1995 WL 782983 (N.Y. Pub. Serv. Comm'n Dec. 11, 1995) (order approving a reimbursement plan submitted after Global's practices were discovered); Global Tel*Link Corp., 68 C.P.U.C. 2d 149, at *6 (Cal. Pub. Util. Comm'n Sept. 20, 1996) (noting that on the date of the decision, Global had refunded over \$3.4 million). This behavior is not limited to Global; a different company operating in Louisiana was found to have committed similar acts: charging customers for two calls that were made at the same time, charging customers for calls that were not even made from the facility, overcharging calls, and adding time to calls. La. Pub. Serv. Comm'n v. Vendormatic, Inc., No. U-22115, 1998 WL 201681 (La. Pub. Serv. Comm'n Feb. 17, 1998). In any event, the situation could be worse: in Texas an inmate is allowed to make one collect call every ninety days, so long as the inmate has

have overbilled *two-thirds* of the interstate calls made from a particular prison.⁴⁴ In Florida, in a five-year time span, three companies were found to have overbilled consumers by a total of over \$2.7 million.⁴⁵

D. States' Use of Revenue

States use the revenue derived from the commissions in different ways. Most states claim to use the funds to offset costs of operating a prison, either by funding programs operated by the Department of Corrections, or by placing the funds in a prisoners' welfare account.⁴⁶ For example, the proceeds may be used to fund health care for prisoners, cash for work-release, and bus tickets home.⁴⁷ Interestingly enough, one state was recently found to have failed to establish "controls to safeguard, reliably account for, or efficiently use the telephone commission monies and was using inmate funds for staffing positions not directly related to the Trust Fund."⁴⁸

Other states place the funds in the general revenue coffers.⁴⁹ Where this is the case, the surcharges on the phone calls can be said to take on the nature of a regressive tax that is imposed exclusively upon the families of those who are incarcerated. One has to question whether such a tax regime is the best method, from a tax policy standpoint, of funding the activities of the state.

However the funds are ultimately used by the state, one could go even further than calling the surcharges a "tax." Indeed, Oliver Wendell Holmes might suggest that from the point of view of the person paying the surcharges, the surcharges are not so much a "tax" as they are a "fine."⁵⁰ That is, the ultimate consumer would likely view the excessive cost of the calls as an additional punishment imposed on the consumer for no reason

refrained from violating any prison rules. James M. Odatto, *Targeting Profits from Prison Cells*, TIMES UNION, Sept. 4, 2000. Texas does not receive a kickback. MAINTAINING FAMILY CONTACT, *supra* note 9, at 28-29.

44. See *Vendormatic*, 1998 WL 201681, at *4 (finding that of the 90,879 tolled calls, Vendormatic correctly charged 13,849, undercharged 12,157, and overcharged 64,873).

45. MAINTAINING FAMILY CONTACT, *supra* note 9, at 27.

46. Fischer, *supra* note 9, at 52.

47. Odatto, *supra* note 43.

48. FLORIDA LEGISLATURE OFFICE OF PROGRAM POLICY ANALYSIS AND GOVERNMENT ACCOUNTABILITY, FOLLOW-UP REPORT ON THE INMATE WELFARE TRUST FUND AND INSTITUTION-BASED ACCOUNTS ADMINISTERED BY THE DEPARTMENT OF CORRECTIONS, No. 96-46 (1997).

49. See *Swan Renews Call*, *supra* note 14; Fischer, *supra* note 9, at 52. See, e.g., JOINT LEGIS. AUDIT, *supra* note 6, at 36.

50. See Oliver Wendell Holmes, *The Path of the Law*, 10 HARV. L. REV. 457, 461 (1897).

other than that a family member of the consumer has been incarcerated. Looking at the matter in this light would raise a number of justice, fairness, and perhaps even due process concerns.⁵¹

E. *The Need to Maximize Access to Telephones*

Most prison officials recognize that it is in the best interests of all parties affected by an incarceration that the incarcerated person maintain contact with friends and family.⁵² That is, prison officials seem to recognize that contact with family is very important not just for the prisoner, but also for the state and the family of the prisoner. Contact with families helps officials maintain order in the prisons, and it facilitates the prisoner's reintegration into society. Therefore, the stated goal of many official policies relating to inmate use of telephones is that prisoner access to telephones should be maximized.⁵³

III. TELECOMMUNICATIONS ACT OF 1996

In 1996, Congress revolutionized the telecommunications market by passing the Telecommunications Act of 1996 (the Act). The impetus behind the Act was a finding that "[t]echnological advances would be more rapid and services would be more widely available and at lower prices if telecommunications markets were competitive rather than regulated monopolies."⁵⁴ In light of this finding, Congress sought to introduce competition into the telecommunications market, for the purpose of

51. Therefore, most lawmaking bodies would likely look at the matter from an entirely different perspective. Most certainly, the phone companies and the states that receive a commission would not take this point of view.

52. See *Rates, Terms, and Condition for Inmate Telecomm. Servs.*, No. 368, 1999 WL 179812, at *1 (Ky. Pub. Serv. Comm'n Jan. 15, 1999). The Department of Corrections testified before the Commission that the Department intended that those who pay for collect phone calls made from prisons pay no more than the amount for a similar call made from outside the prison. *Id.* See also *Ala. Pub. Serv. Comm'n v. All Customer-owned, Coin-Operated Tel. Serv. Providers Serving Confinement Facilities*, No. 23871, 1995 WL 337071, at *1-2 (Ala. Pub. Serv. Comm'n May 1, 1995) (citing testimony of an economic expert retained by the Alabama Attorney General's Office who testified that no valid purpose would be served by establishing higher rates for inmate phone calls). In both cases, the Public Service Commissions agreed to cap the rates on calls made from prison to match outside rates. *Rates, Terms, and Condition for Inmate Telecomm. Servs.*, 1999 WL 179812, at *3; *Ala. Pub. Serv. Comm'n*, 1995 WL 337071, at *5.

53. One has to wonder how often the actual attitudes of prison officials reflect this stated policy. Upon receiving information that the state had just been sued for allegedly monopolizing the provision of telephone services to prisoners, one state official's only response was that "[i]nmates do not have a constitutional right to make phone calls." *Suit Targets Rates*, *supra* note 15.

54. H.R. REP. NO. 104-204, at 48 (1995).

protecting consumers from potential monopoly abuses.⁵⁵ To promote competition, Congress removed state and local barriers to entry, required providers to interconnect with competitors, and placed an affirmative duty on the commission and the states to ensure that universal service is available at rates that are just, reasonable, and affordable. These changes will be analyzed individually.

A. *Removal of Barriers to Entry*

With respect to the removal of the state and local barriers to entry, the Act has broad provisions for the preemption of state and local regulations that impede the Act's operation. The Act provides: "No State or local statute or regulation, or other State or local legal requirement, may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service."⁵⁶ These provisions grant the FCC the authority to set aside any state law that is deemed inconsistent with the Act's purpose.⁵⁷

Clearly, by allowing only one company to be the provider of service to a prison, the state has put into place a "legal requirement" that prevents entry into the market. This legal requirement is essentially a government-granted monopoly. Section 253(a) of the Act is directed squarely against this practice, because the practice is inconsistent with free entry into the market. Further, the state requirement conflicts with the congressional belief that technological advances would be more rapid, and services would be available at lower prices, if telecommunications markets were competitive marketplaces rather than regulated monopolies.

B. *Interconnection*

Congress further imposed a general duty on telecommunications providers to interconnect with the facilities and equipment of other telecommunications providers.⁵⁸ The incumbent is to be compensated by

55. *Id.*

56. See 47 U.S.C. § 253(a) (Supp. V 1999).

57. See 47 U.S.C. § 253(a), (d) (Supp. V 1999). See also S. REP. NO. 104-230, at 126 (1996) (noting that the bill preempts almost all state and local barriers to competition).

58. See 47 U.S.C. § 251(a) (Supp. V 1999); 47 C.F.R. § 51.305 (2000). Note that § 251(a) requires a provider to share infrastructure and facilities. Section 251(b)(4) imposes the duty to afford access to rights-of-way, poles, conduits, and ducts. 47 U.S.C. § 251(b)(4) (Supp. V 1999). However, local exchange carriers would "not be required to take any action that is economically unreasonable or that is contrary to the public interest." 47 C.F.R. § 59.2(a) (2000). The obligation to negotiate interconnection applies to a local exchange carrier that is determined by the FCC to have market power in providing exchange services. S. REP. NO. 104-230, at 117 (1996). The Act creates the potential for competition where formerly there was a natural monopoly.

the competitor at reasonable terms, which generally has been construed to mean at the costs of the incumbent.⁵⁹ Essentially, these provisions require a provider to lease its facilities to a rival. The provisions are designed to allow rivals to enter the market without sustaining a substantial amount of sunk or fixed costs up front; when the rival leases access, these costs are allocated over time. Therefore, the provision lowers a barrier to entry, thereby promoting competition in the market.

The interconnection provisions, if applied to the contracts, would require an incumbent to lease the necessary facilities and lines to a rival. Theoretically, both providers could share everything, even the already existing security system. Recall that the states seek to justify the exclusive dealing provisions by asserting that the costs are too high for two firms to both install and operate systems. But by interconnecting and using one system, two firms could compete without incurring the expenses associated with installing and operating two duplicative systems. Further, it is likely that competitive pressures would force each firm to drive down costs.⁶⁰ If so, then it is possible that two firms could operate at lower cost than a single firm. Finally, note that the exclusive dealing provisions also prevent interconnection.

C. Universal Service at Just Rates

To effectuate the ultimate goal of promoting consumer welfare, Congress imposed an affirmative duty on the states to prevent unnecessarily high rates from being charged. Specifically, the Act provides that "[t]he Commission and the States should ensure that universal service is available at rates that are just, reasonable, and affordable."⁶¹ Therefore, it is not sufficient for the states to promote competition; the states must also take affirmative action to ensure that all consumers have access to service at reasonable rates. The states have violated this duty in three material respects: by requiring that a commission be paid to the state, by allowing the provider to impose additional surcharges (which in part pay for the commission), and by granting a monopoly to the provider. The states have violated this duty because it is profitable for them to do so, not because the present situation is beneficial to consumers. This practice is in direct

59. Some question has arisen as to how "costs" should be measured. See, e.g., William J. Baumol & Thomas W. Merrill, *Deregulatory Takings, Breach of the Regulatory Contract, and the Telecommunications Act of 1996*, 72 N.Y.U. L. REV. 1037, 1039 (1997) (arguing that efficiency requires pricing by forward-looking costs, and that the Takings Clause does not preclude pricing on a forward-looking basis).

60. What costs are left? Managerial, administrative, billing, and any other costs which do not pertain directly to the costs associated with the lines and facilities.

61. 47 U.S.C. § 254(i) (Supp. V 1999).

conflict with the congressionally imposed obligation to ensure that service is provided at reasonable and affordable rates.

Ultimately, one is left with the distinct impression that state requirements are in direct conflict with both the plain terms and the spirit of the Act. Consequently, the FCC should exercise the powers conferred by the Act, and preempt any state contract that requires a commission to be paid to the state, or that grants a monopoly to a provider.

IV. EFFICIENCY ANALYSIS

The alleged superiority of law and economics, as a body of jurisprudence, is based on the fact that it uses economics to test the validity and/or efficacy of rules, and the fact that economics is a less subjective measure than those measures employed by rival jurisprudential theories.⁶² Generally speaking, law and economics suggests that the role of the law is to maximize wealth, and that all laws should be construed so as to maximize wealth. Wealth maximization is, by some, measured in dollars; dollars are less subjective than general notions of "justice" or "fairness." Therefore, an efficiency analysis performed on two competing pieces of legislation, for example, is a less subjective measure of the merits of the proposed laws than a discussion about the comparative justice of the respective proposals, or the impact of the proposals on natural rights.

Whose wealth is sought to be maximized: consumer wealth or social wealth? What is the difference between the two? Social welfare is defined as the sum of consumer welfare and producer welfare. The distinction between the two is important because they may not necessarily point in the same direction. A particular policy may enhance social wealth but adversely affect consumer wealth, or vice versa. Those who subscribe to law and economics would generally assert that maximization of wealth should be analyzed in terms of social welfare.⁶³ The issue arises, however, because the current approach in both antitrust jurisprudence and telecommunications law generally involves looking to consumer welfare.⁶⁴

Perfect competition maximizes consumer welfare better than monopoly. Competition is also preferable to regulation, perhaps even where it is a natural monopoly that is being regulated.⁶⁵ Therefore,

62. There is at least some merit to this assertion. It is probably easier to prove that a particular rule is inefficient than it is to prove that the same rule is unjust.

63. See GUIDO CALABRESI, *THE COSTS OF ACCIDENTS* 18-20 (1970).

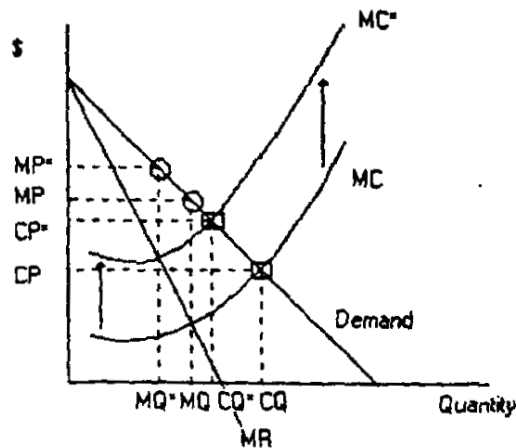
64. ROBERT BORK, *THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF* 81 (1978).

65. At least, this Article posits that this must be Congress's belief, for this is really the only justification for the Act.

competition generally maximizes consumer welfare better than monopoly or natural monopoly.

The diagram below depicts the economic consequences of the current structure of the contracts.⁶⁶ In it, the label "MP" denotes the price that would be charged by a monopoly. Similarly, "MP*" denotes the monopoly price when a commission is required by the state. "CP" refers to the competitive price, and "CP*" refers to the competitive price when a commission is required. "MQ" refers to the quantity that a monopoly would be expected to produce. "MQ*" denotes the quantity produced by a monopoly when a commission is imposed. "MC" represents the marginal cost of production. "CQ" represents the quantity produced when there is competition. And, finally, "CQ*" represents the quantity produced when there is competition and a commission is imposed.

Figure 1. Prices Charged by Monopoly and Competitive Firms



A monopolist will produce its goods at a level such that marginal revenue equals marginal cost. Therefore, the amount produced by a monopoly may be determined by locating (on Figure 1) the intersection of the marginal revenue and marginal cost curves. Note, however, that the actual price charged by a monopoly is that which corresponds to the demand for the amount produced. Accordingly, the price charged by a monopoly may be determined by drawing a vertical line from the intersection of the marginal revenue and marginal cost curves to the

66. See SULLIVAN & HOVENKAMP, *supra* note 10, at 61-62.

demand curve. Therefore, the circles depict the price charged and the quantity produced by a monopolist. Contrast the output of and price charged by a monopoly to that of a firm operating in a competitive environment. A firm operating in a competitive market will produce its goods such that the market price equals the marginal cost of production. Stated differently, in competition, firms will also price their goods at the price that corresponds to the intersection of the marginal cost and demand curves. Therefore, the rectangles in the diagram depict the price charged and quantity produced by a firm operating in a competitive market. Clearly, competition results in a lower price and higher output than a monopoly.

The upward shift in the marginal cost curve represents the effect of a kickback. The consequences of the imposition of the kickback are higher prices and less output. Clearly, from the perspective of the consumer, a monopoly and commission are disfavored. But consumer dislike for a policy does not necessarily imply that the policy is detrimental to social welfare. Recall that social welfare takes into consideration the effect of the policy on the consumers and the producers. If the consumers are harmed to the extent of X , and the producers are benefited to the extent of X , then the policy simply causes a transfer of wealth from the consumers to the producers; in the aggregate, the policy does not adversely affect the social welfare. In other words, because the policy does not adversely affect the social welfare it is not to be condemned on those grounds.

From the social welfare perspective, is the monopoly, or the commission, preferable to the alternatives? There are two theories that may be used to answer this question. The theory of Pareto Optimality states that a new rule is superior to the old when the new rule improves at least one person's position and no person's position is devalued by the rule's adoption.⁶⁷ The principal shortcoming of this theory is that it has limited application. Often, someone will lose under the new rule, and even if the amount of the loss is negligible, the theory is unable to evaluate the value of the new rule.

An alternate approach is taken by the Kaldor-Hicks theory. This theory holds that a new rule is superior to the old rule when the winners (under the new rule) gain more than the losers lose.⁶⁸ Judge Posner modifies this theory in one important respect: Posner asserts that a legal rule is wealth maximizing if the winners would be willing to pay more for its adoption than the losers would be willing to pay for the rule not to be

67. ROBERT COOTER & THOMAS ULEN, *LAW AND ECONOMICS* 12, 43 (3d ed. 2000); DAN DOBBS, *LAW OF REMEDIES* 30 (2d ed. 1993).

68. DOBBS, *supra* note 67, at 30; COOTER & ULEN, *supra* note 67, at 44.

adopted.⁶⁹ It is crucial to note that the winner does not actually have to pay the loser. As long as payment is theoretically possible, the rule is wealth maximizing. Willingness to pay is one measure of people's preferences, and it is easier to measure "dollars versus dollars" than it is to measure "preferences versus preferences." In this respect, Posner's version of the Kaldor-Hicks theory is superior (in its application) to the traditional formulation of Kaldor-Hicks. Accordingly, this Article will define wealth maximization in terms of Posner's version of Kaldor-Hicks efficiency. Concerns of "fairness" will be given no weight in assessing the various policies.⁷⁰

V. STRUCTURE OF THE CONTRACTS AND GAME THEORY

This Section consists of two subsections. The first subsection will develop a series of payoff matrices, and use the matrices to show how the existing structure of the contracts arose. The second subsection will use game theory to demonstrate that the award process causes the inefficiencies of the current contracts to perpetuate.

A. *The Payoff Matrix*

A payoff matrix is a simple device. Here, two matrices will be used to depict the incentives to the state for adopting a particular structure to the contracts. The first matrix illustrates the incentives to the state for structuring the contract so the state receives a commission on the revenues derived by the telephone company. The second matrix depicts the incentives for structuring the agreement so a single telephone company will provide the service.

1. State Incentives for Requiring Commissions

In Table 1, the left column depicts the potential political gain that may be derived from structuring the contracts in a particular manner.⁷¹ Note that

69. Richard A. Posner, *Utilitarianism, Economics, and Legal Theory*, 8 J. LEGAL STUDIES 103, 119-22 (1979).

70. According to Kaplow and Shavell, a normative assessment of legal policy should be driven exclusively by considerations of social welfare, and notions of fairness should be given no independent weight in assessing the policy. Louis Kaplow & Steven Shavell, *Fairness Versus Welfare*, 114 HARV. L. REV. 961, 966 (2001).

71. Political gain is the political currency or benefit the state receives when it grants benefits to its residents. There is an inherent difficulty in attempting to measure the political gain to the state. This difficulty is augmented when one seeks to compare the projected political gain to the financial gain, and to determine which is greater. One measure of political loss (or gain) to the state is the negative value of the financial gain (or loss) to the state. That is, if the state passes a tax that benefits the state to the extent of "3" (dollars or units), then the state has caused the consumer to incur a financial loss of "3." Since the state

if the state continues to require the commission, the state sustains a political loss of "1."

Table 1. *Incentives for requiring commissions*

| | Political Gain | Financial Gain | Total Gain |
|-------------|----------------|----------------|------------|
| Kickback | -1 | 4 | 3 |
| No Kickback | 1 | -4 | -3 |

The families of prisoners are the only group harmed by this policy: they are not an organized body, nor are they seen as a particularly sympathetic group. Similarly, the state may derive some political gain from structuring the contract in favor of the families, but the gain would not be significant. The company is largely ambivalent about the requirement of the kickback, because most of the cost of the commission can be passed on to the consumer in the form of surcharges.⁷²

The right column in Table 1 represents the potential financial gain to the state. As the table indicates, the state can require the commission, and thereby derive a financial gain of "4," and a total gain of "3." If the state waives the commission, the state suffers a financial loss to the extent of the forgone commission.⁷³ The total loss if the state waives the commission is "3." The state clearly has a strong financial incentive to

has imposed this financial loss on the consumer, the state suffers a political loss of "3" because the consumer's political support of the state wanes when the consumer is made to pay the state.

This approach is not without defects. First of all, a person's political support of the state is not necessarily based on, or even influenced by, one decision made by the state. Further, the state receives the aggregate amount derived from the individual payments made by all the consumers. If used properly, this aggregate amount can benefit the state more than the smaller amounts benefited the individuals. While there is probably an inverse relationship between political support and financial costs imposed on consumers, it is unlikely that the relationship is a one-to-one ratio. When the Postal Service increases the price of a stamp by a penny, for example, my political support of the Postal Service does not fall by a corresponding amount. To the consumer, the loss of one penny is miniscule; but the Postal Service's loss of everyone's pennies matters a great deal. In the situation of the phone contracts loss is imposed on a group that does not wield great political clout. Therefore, the state does not suffer a substantial political loss when it imposes a financial loss on this particular group. For purposes of this illustration, the Author assumes that the ratio between financial gain to the state and political loss to the state is four to one. Therefore, the state will have a financial gain of four and political loss of one.

72. Of course an additional surcharge would result in higher total prices, causing demand for the service to fall and a loss of sales for the company. In this particular market, however, it is likely that the demand is not very responsive to price changes.

73. The lost commission is an opportunity cost. This cost must be factored in because the state will have to replace the lost commission.

require that the telephone company pay a commission. As political incentives are substantially outweighed by financial incentives, a rational state will require a commission.

2. Incentives for Utilizing an Exclusive Dealing Provision

In Table 2, the column on the left depicts the estimated net political gain or loss. Three groups will exert political pressure on the state: families, the incumbent, and the prospective competitor. As before, the value of the political loss (or gain) to the state is generally equal to the negative value of the financial gain (or loss) to the constituents.⁷⁴

Table 2. Incentives for Utilizing an Exclusive Dealing Provision

| | Political Gain | Financial Gain | Total Gain |
|---------------|----------------|----------------|------------|
| Exclusive | -0.073 | \$0.083 | 0.01 |
| Non-exclusive | 0.073 | -\$0.083 | -0.01 |

Assume that a monopolist can charge a monopoly price and derive a profit of \$0.25 on each phone call. If there is competition, then the incumbent can no longer charge a monopoly price. The incumbent will be forced to accept a lower profit level of \$0.15 per phone call. Therefore, an incumbent stands to have a financial gain of \$0.10 per phone call if the state grants the incumbent a monopoly.⁷⁵

If the competitor is allowed to enter the market, the competitor will earn \$0.15 per phone call. Conversely, if the competitor is never allowed to access the market, then the competitor loses the opportunity to derive \$0.15 in revenue. This lost opportunity has a value equal to the lost revenue. Therefore, the competitor will lose \$0.15 if the state grants a monopoly to the incumbent.

As discussed *infra*, the cost difference between monopoly and competition, to the consumer, is \$0.225. Accordingly, the consumer will incur a financial loss of \$0.225 if the state grants a monopoly. For the reasons previously discussed, however, the political loss incurred by the state because of monopoly will be much less than the direct financial loss incurred by the consumer.⁷⁶ In this hypothetical, the political loss is valued

74. Although the political gain (or loss) is calculated on the basis of the negative value of the financial loss (or gain), the political gain is not adjusted to reflect tax consequences (i.e., the state's financial gains will factor in additional tax revenue). The Author does not believe that this difference in the calculation of the gains or losses undermines the analysis.

75. These numbers are the same as those used in the schematics in Part VI, *infra*.

76. Again, it is unlikely that there is a one-to-one ratio in this scenario. The families are

at \$0.023.⁷⁷

Therefore, the political loss incurred by the state, when the state grants a monopoly, is calculated as follows:

$$0.10 - 0.15 - 0.023 = -0.073.$$

The political gain derived from permitting competition is calculated in the same manner, but by using the negative values of the same numbers:

$$-0.10 + 0.15 + 0.023 = 0.073.$$

The middle column in Table 2 depicts the direct financial gain that may be derived by the state if the telephone company is allowed to be the exclusive service provider. If the state grants a monopoly, then the state will derive \$0.25 in revenue from the commission charged to a monopolist. But the state will also earn a commission if the state allows competition. Therefore, to determine the financial gain derived solely from the grant of monopoly, one must first take the difference in the commission between monopoly and competition. If the commission derived by the state in the context of a monopoly is \$0.25 per call, and the commission derived from a single phone call in a competitive environment is \$0.175, then the difference is as follows:

$$\$0.25 - \$0.175 = \$0.075.$$

The state will also receive income tax⁷⁸ from the profit derived by the company. The additional amount of tax from granting a monopoly⁷⁹ at a 10% tax rate is calculated as follows:

$$\$0.075 \times 10\% = \$0.008.$$

Finally, the state's revenue is calculated by adding the tax revenue to the amount of the commission:

$$\$0.075 + \$0.008 = \$0.083.$$

Consequently, the state has a financial incentive of \$0.083 to grant a monopoly. If the state refrains from granting a monopoly, then the state incurs an opportunity cost of \$0.083. When the financial incentives are

unorganized, politically weak, and perhaps even uninformed about the effect of monopoly. The state may more easily justify the monopoly than the commission. Further, a monopoly is less likely to inflame the public than a commission. That is, the requirement of the commission may appear to the public as driven by greed, bad tax policy, or bad money management. All of the state's justifications for the commission revolve around the need to generate revenue, and this is rarely popular. The state can more easily justify a monopoly to the American public, which is easily confused by rhetoric (even where the rhetoric is baseless). The Author therefore assumes that on this particular issue, the ratio of political loss to financial gain is ten to one.

77. $\$0.225 / 10 = 0.023$.

78. This assumes a 10% tax on net income.

79. Monopoly profit is higher than the profit derived by a firm operating in a competitive market. When the state grants a monopoly, they are able to tax this higher profit level.

considered in conjunction with the political incentives, it is apparent that the state, when acting to maximize its own welfare, will grant a monopoly.

When examined in the aggregate, these financial incentives are far from trivial. Tables 1 and 2 are calculated on a per-call basis,⁸⁰ but as of 1998 nearly two million persons were incarcerated nationwide. If each inmate makes one call per week on average, the numbers above can be multiplied by 104 million to reflect the number of calls placed in one year.

Taken together, Tables 1 and 2 indicate that the state has both political and financial incentives to require a commission and to grant a monopoly to the telecommunications service provider. A rational state will act on these incentives and structure the contracts accordingly. Unless the underlying incentives change, this behavior will continue indefinitely.

B. Game Theory in the Awarding of Contracts

Game theory is an economic theory that can be used to gain insight into legal rules. The theory is used to identify the optimal strategy for one actor when the conduct of that actor depends on a course of conduct chosen by another actor.⁸¹ As applied to the present contracts between the state and the telecommunications provider, game theory will demonstrate that the award process perpetuates the inefficiencies of current contracts. Game theory will show that the award process creates a permanent market failure that will not correct itself until the process is modified.

Assume that there are only two firms competing, Company X and Company Y. Each competes for a single contract. Further assume that both X and Y know that the state will award the contract on the basis of the size of the kickback offered to it. The companies are both motivated by profit, and therefore each will conduct itself to maximize its own profit.

80. Also note that the "cost of the call," as used here, is much lower than the actual cost in the real world.

81. See COOTER & ULEN, *supra* note 67, at 34-38.

Table 3. Game theory in the award of contracts

| | Company X | | |
|-----------|-------------------------|-------------------------|-------------------------|
| | | <i>Large Commission</i> | <i>Small Commission</i> |
| | | | |
| Company Y | <i>Large Commission</i> | A (High, High) | C (Low, High) |
| | <i>Small Commission</i> | B (High, Low) | D (Low, Low) |

The choice variable for each firm is the commission offered to the state. The firms may offer either a large commission or a small one. The terms of "high" and "low" in Table 3 indicate the payoff for each firm under each choice, given the choice of their rival.⁸² In the context of this game, the large commission strictly dominates the low commission for each firm. The payoff to Company X when choosing a large commission is greater than when choosing a small commission, regardless of the bidding strategy of Company Y. The same is true for Company X. Both firms will therefore choose the high commission, competitive outcome "A." While both would be marginally better off if they would choose to cooperate, there is no incentive to cooperate because there is no guarantee that a rival firm will also choose the cooperative solution. Each firm chooses the competitive solution because they are better off than if they cooperated, but their rival did not.

The solution to this game highlights a fundamental defect in the award process. Taken as a whole, the award process inevitably leads to a contract containing an exclusive dealing provision and a high commission for the state. With the telephone company and the state acting rationally in their own best interests, the consumer inevitably loses. Until the incentives change, or until the state begins to elevate the interests of the consumer above those of the state, this situation will continue indefinitely. This is a

82. The payoff for a large commission is "high" because by offering a high commission, the firm is more likely to be awarded the contract. Since the telecommunications service provider does not pay the cost of the commission itself, the fact that the commission is high does not reduce the payoff to the firm. If the firm were the only bidder, it would offer a low kickback, because the lower the kickback, the higher the demand for making calls.

permanent nontransitory market failure.

VI. ANALYSIS OF THE CONTRACTS

This Section will introduce alternative structures to the contracts, and then determine whether the adoption of an alternate structure would be an efficiency-enhancing move. To provide a meaningful frame of reference, the discussion will begin with a brief analysis of the present contracts. In the discussion of each alternative, a number of simplifying assumptions will be made. These assumptions will remain the same in the analysis of each alternative.

The company is assumed to be responsible for the full cost of the security system, and this cost is included in the company's total cost in administering the contract. Where the state requires a commission, the commission will be calculated as 50% of gross revenues. The commission is passed directly on to the consumer in the form of a surcharge added to the cost of the call. Where the state waives the commission, the surcharge is eliminated. Assume that the state imposes a tax of 10% on the net income of the provider(s). Further, and perhaps most importantly, the analyses of the competitive arrangements presume that the market is not a natural monopoly.⁸³

Finally, each structure will be analyzed in terms of the cost of, or revenue derived from, a single phone call. Two phone calls will be depicted in a situation where competition is permitted, only to illustrate the effect of competition. However, where two calls are depicted, the analysis will still focus on costs and revenues associated with one call.

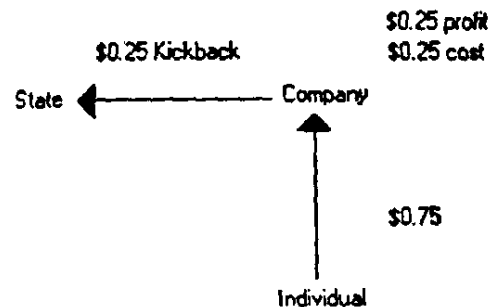
A. Present Contracts

Figure 2 illustrates the structure of the present contracts. The individual pays \$0.75 for a phone call. Of this amount, \$0.25 represents the commission, and this amount passes through the company to the state. The remaining \$0.50 is retained by the telephone company. Of that amount, \$0.25 is allocated to the costs incurred by the company in providing the services, and \$0.25 represents the monopoly profit retained by the company.

The profit of \$0.25 is taxed by the state at the rate of 10%. Therefore, the state derives \$0.025 in tax revenue, and \$0.275 in total revenue.

83. Proving the validity of this assumption is beyond the scope of this paper. The Author believes the assumption accurately reflects the actual operation of the market. The evidence supporting the assertion of natural monopoly is weak. See *infra* Section II.A.

Figure 2. Diagram of present contracts



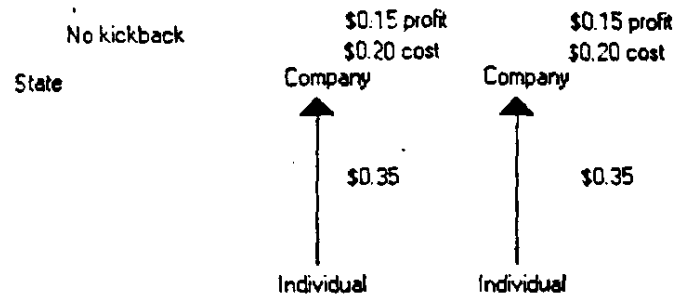
B. No Kickback, Competition

Consider a situation where the state forgoes the kickback and allows competition to be introduced. In this scenario, illustrated in Figure 3, the individual pays \$0.35 for the phone call. Of that sum, the company retains \$0.15 profit, and \$0.20 is allocated to cover the costs of providing the service. The company's total cost of providing the service falls from \$0.25 to \$0.20. The cost savings are driven by the threat of competition and the related need to increase efficiency and to reduce costs. Also, after a competitor has been introduced, the incumbent may pass on a portion of sunk costs to the challenger, reducing the incumbent's fixed costs.⁸⁴ Competition forces the companies to accept a lower profit level, and therefore only \$0.15 of profit is retained by the company.⁸⁵

84. This prediction assumes that the companies are subject to a regime like the Telecommunications Act of 1996, which requires an incumbent to lease access to a competitor. The lease payments are driven by the incumbent's costs. Presumably, when the incumbent acquired the contract, the incumbent incurred a high number of one-time expenses. Under traditional accounting techniques, these expenses can be proportionally allocated to each call. Therefore, when the challenger leases access to the system, the incumbent may pass these expenses onto the challenger, effectively relieving the incumbent from incurring those expenses.

85. As prices continue to fall, consumer use of the system will increase, and companies' fixed costs may therefore be allocated over a greater number of calls, although variable costs will increase.

Figure 3. Diagram of competition without kickback



As Figure 3 illustrates, the state earns no revenue from commissions, but it taxes the company's revenue of \$0.15. Therefore, the state derives revenues of \$0.015. For the consumer, the cost of the telephone call has fallen from \$0.75 to \$0.35, saving her \$0.40. Therefore, this scenario is a significant improvement from a consumer welfare point of view.

There is also room for a bargain in this situation. That is, this scenario represents a change that would increase the social welfare. The caller would theoretically pay up to \$0.40 to acquire this arrangement, because she will save this amount on the cost of a call. Therefore, if the caller paid \$0.39 for this arrangement, then she would be better off by \$0.01. The telephone company would require at least \$0.10 to offset the loss of profit, and the state would require at least \$0.26 to forgo the kickback and the taxes imposed on monopoly profits.

$$\$0.40 > \$0.26 + \$0.10.$$

Consequently, the individual could pay the state and the company these amounts, and the social welfare would be improved by an amount between \$0.02 and \$0.05, depending on the precise nature of the bargain struck by the parties.

The adoption of this structure would be an efficiency-enhancing move. It is important to note that the individual need not actually compensate the state or the company. As long as compensation is theoretically possible, the new regime is an improvement over the old.

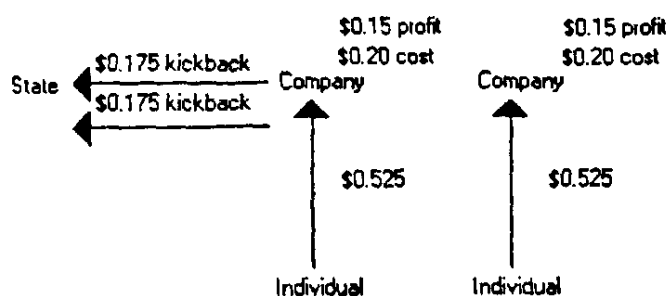
Note also that this structure most closely resembles the public policy of the Act. Here, there are no state barriers to entry in the telecommunications market. This structure also most advances consumer welfare by "ensur[ing] that universal service is available at rates that are just, reasonable, and affordable."⁸⁶

86. 47 U.S.C. § 254(i) (Supp. V 1999).

C. Kickback, Competition

In this scenario, presented in Figure 4, the state continues to require a commission, but it allows competition to be introduced. The company's costs fall to \$0.20,⁸⁷ and the threat of competition forces the telephone company to accept a lower level of profits. Therefore, the company's gross revenues are \$0.35. The state earns \$0.015 in tax revenue and a commission of \$0.175. Accordingly, total state revenue is \$0.19. The commission is passed on to the consumer. Therefore, the individual pays \$0.525 for a phone call.

Figure 4. Diagram of competition with kickback



In the present-day situation (the scenario presented in Section VI.A, with a kickback and no competition), the cost of the call is \$0.75. Recall that in the first alternative (presented in Section VI.B, with no kickback and competition), the cost of the call is \$0.35. In the second alternative, presented in Figure 4, the cost is \$0.525. From a consumer welfare perspective, this alternative is clearly preferable to the first, but the second maximizes consumer welfare better than the first and current-day arrangement.

As the consumer would save \$0.225 in this option over the current situation, he would be willing to pay up to \$0.225 for this alternative. The state would require \$0.085 to offset the loss in kickback and taxes. The company would require \$0.10 to offset the loss in profit.

$$\$0.225 > \$0.10 + \$0.085.$$

Note that here, too, there is room for a bargain; the consumer could pay the state and the telephone company these amounts, and social welfare would be improved by \$0.04. Therefore, this arrangement also enhances

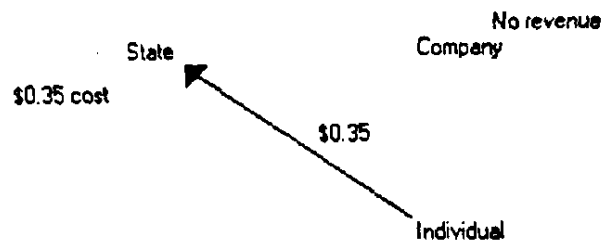
87. The costs fall for the reasons discussed in the previous scenario. See *supra* Part VI.B.

consumer welfare and social welfare.

D. State-Owned Enterprise

This alternative, represented by Figure 5, depicts a situation in which the state would assume the role of the private company and provide the services directly to the individual.

Figure 5. Diagram of state-owned enterprise



As the state would be responsible for the operation of the phone system, the system itself would presumably be less efficient than a similar system operated by a private firm. Consequently, the state operates at a higher cost level, \$0.35, than does the private company. The consumer would only pay \$0.35 for a phone call, however. This scenario would also bring about an improvement in consumer welfare from the present-day situation.

In order to adopt such an arrangement, the state would require the consumer to pay an additional \$0.275 to compensate the state for the loss of kickback and taxes, and the company would require the consumer to pay \$0.25 to replace the forgone profits. The consumer would be willing to pay up to \$0.40, but no more than that.

$$\$0.40 < \$0.275 + \$0.25.$$

Therefore, there is no room for a bargain here. Consequently, while this arrangement would not enhance social welfare, it would enhance consumer welfare.

E. Comparison of Approaches

How the four aforementioned approaches compare to one another is presented in Table 4.

Table 4. Comparison of approaches

| | Present Contracts | No Kickback, Competition | Kickback, Competition | State- owned enterprise |
|-------------------------|----------------------|--------------------------------|--------------------------|-------------------------------|
| Company | \$0.25 | \$0.15 | \$0.15 | \$0 |
| State | \$0.275 | \$0.015 | \$0.19 | \$0 |
| Individual | -\$0.75 | -\$0.35 | -\$0.525 | -\$0.35 |
| Net Social Gain/Loss | -\$0.23 | -\$0.185 | -\$0.185 | -\$0.35 |

Of the available options presented, either "competitive" regime is more efficient than the present structure, from a Kaldor-Hicks standpoint. This is so because both competitive regimes minimize the net social loss better than the present regime does. A lesser amount of social loss is really a social gain.

As between the two competitive regimes, the second scenario (no kickback, competition) is clearly superior from a consumer welfare point of view. The first alternative would bring about a 50% reduction in the cost of the call to the consumer, whereas the second alternative would bring about a 30% reduction.

However, both actors involved in making the structural decision—the state and the company—prefer the present structure to any other. Table 4 illustrates why. Note that if the state maintains the status quo, the state will receive \$0.275 in revenue. If the state moves to the first alternative, which would be better for the consumer, then the state will derive *only 5%* of the revenue it formerly derived.⁸⁸ By moving to the second scenario, the company will realize 60% of its former profit level.⁸⁹ Neither the state nor the company has a financial incentive to make this change, no matter how inefficient or harmful to consumers the present structure may be.

If it is theoretically possible for consumers to purchase a more competitive regime, then why do they not do so? There are a number of possible reasons. First, the consumers are probably unorganized, and any purchasing decision would require a great deal of cooperation. Second,

88. $\$0.015 / \$0.275 = \$0.05$.

89. $\$0.15 / \$0.25 = \$0.60$.

there is a cost to organizing. Third, there are transaction costs of negotiating a deal. It is possible that these costs are so high that they preclude a deal from being reached. Fourth, it is possible that the consumers lack information: they may not know of the possibility of reaching a bargain, how to organize, or who to contact to set up the transaction.

VII. CONCLUSION

The present state of affairs is inefficient. It came about because the state and the company entered into a third-party beneficiary contract, and in so doing, both actors focused only on their own welfare and neglected the so-called "beneficiary" of the contract. Ultimately, the problem with the present situation is that this behavior is entirely rational for both the states and the telephone companies. That is, it is reasonable to expect the states and the companies to place their own welfare before that of other parties. Economics presumes that actors will generally act to maximize their own welfare, and this is exactly what the states and the companies have done. In this particular context, however, the conduct of the states has created inefficiencies, which, by definition, are wasteful and socially harmful. If the goal of law is to minimize inefficiencies, then new regulation is appropriate.

The letter and the spirit of the Telecommunications Act of 1996 gives the FCC the power to regulate these contracts. The FCC should exercise this power by preempting and regulating those contracts that grant a monopoly or require that a commission be paid to the state.